DOCUMENT RESUME

ED 291 039 CG 020 571

AUTHOR Grina, Michaele Erin
TITLE A Descriptive Study of Community College Students Coping with Examination Stress.
PUB DATE 30 Apr 87
NOTE 16p.; Excerpt from Ph.D. Dissertation, Oregon State University.
PUB TYPE Reports - Research/Technical (143) -- Dissertations/Theses - Doctoral Dissertations (041)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Cognitive Style; *Community Colleges; *Coping; Counseling Services; *Stress Variables; *Test Anxiety; Two Year Colleges; *Two Year College Students

ABSTRACT

In previous research students' reactions to examinations from a cognitive-process perspective have been based on a singular study of university college students. The purpose of this study was to describe and predict students' reactions to a community college mid-term examination, based on a cognitively-oriented, process-centered theory of stress and coping. Students' reactions were expected to produce shifting patterns of their thinking, feeling, and coping through three stages of the examination: anticipation stage before the examination (Time I); the day of the examination (Time II); and the outcome stage when grades were announced (TIme III). Subjects consisted of freshman and sophomore community college student volunteers (N=117) enrolled in a mathematics course. Personality traits, emotions, and coping were assessed. Findings of the study in regard to stress and coping being defined as a process were inconclusive. In contrast to an earlier study, stress emotions were not shown to be a process. The results for considering coping as a process were also inconclusive, although significant changes in coping were observed. Individual differences in emotional reactions recorded at each stage of the examination were due in large part to cognitive appraisal and coping. (Implications of the research for counseling programs promoting academic achievement, study skills classes, and counseling test-anxious students are presented.) (ABL)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 271039

A DESCRIPTIVE STUDY OF COMMUNITY COLLEGE STUDENTS COPING WITH EXAMINATION STRESS

(An excerpt from my dissertation)

EXAMINATION STRESS FROM A COGNITIVE PERSPECTIVE

By

Michaele Erin Grina, Ph.D.

CG 020571

April 30, 1987

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☒ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Michaele Erin Grina

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

INTRODUCTION

Thus far, students' reactions to examinations from a cognitive-process perspective have been based on a singular study of 189 college students from the University of California at Berkeley (Lazarus & Folkman, 1985). To generalize about reactions to evaluative conditions, it is important to replicate and expand their findings.

The purpose of this study was to describe and predict students' reactions to a community college mid-term examination. Given that evaluative situations are generally considered stressful in nature, stressful reactions were expected to be recorded in relation to the examination. This study was based on a cognitively-oriented, process-centered theory of stress and coping (Lazarus & Folkman, 1984). This theoretical orientation describes stress and coping as complex processes. The students' reactions to the examination were expected to produce shifting patterns of their thinking, feeling, and coping. In this respect, the examination was viewed as an unfolding process. The students' thoughts, emotions, and coping strategies were assessed and expected to change during three states of the examination: the anticipation stage before the examination (Time I); the day of the examination (Time II); and the outcome stage when grades were announced (Time III).

Another important dimension of Lazarus' stress theory tested in this study is that mediating factors would influence students' reactions to the examination encounter. The present study was directed

at describing and predicting how the mediating factors - thoughts, feelings, coping, and personality traits interacted to explain the variations in reactions recorded during the course of the examination.

Subjects consisted of 117 freshman and sophomore student volunteers from Portland Community College who were enrolled in four sections of college mathematics classes. Measurement of personality traits was conducted by means of three standardized instruments: the Reactions to Test Scale, and the Rosenberg Self-Esteem Scale, and the Test Efficacy Scale. Measurement of emotion was assessed by means of the Stakes and Difficulty of the Examination Scale. Measurement of coping was administered by means of the Ways of Coping Checklist.

Discussion, Conclusions, and Implications

The concept of process is at the heart of Lazarus' cognitive theory of stress and coping. According to Lazarus, a process-oriented approach has two meanings: first, that the person and the stress event are in a dynamic relationship that is constantly changing and, second that this relationship is bidirectional, with the person and the stress event each acting on the other. A process orientation means that a person's reactions are likely to change throughout the stressful encounter as a result of the shifts in the interaction of the person and the event. A person's reactions to the event are considered to be influenced by his/her cognitive appraisal and management of the potential stressful encounter. If the event is appraised as stressful, then stress emotions are generated. As the person's appraisal of a stressful encounter changes, so, too, will the person's associated

emotions and coping efforts (Lazarus & Folkman, 1984).

A central purpose of this study was to determine whether or not emotions and coping would change during stages of an examination. If changes in emotions and coping were recorded at different phases of the examination, then these findings would substantiate the position that stress and coping are processes.

The findings in this study, in regard to stress and coping being defined as a process, were inconclusive. In terms of the stress emotions that were measured, only threat emotions showed significant changes in their use from the anticipatory stage (Time I) to the outcome stage (Time III). Harm emotions were predicted to increase when the outcome of the examination results would be known (Time III). The students reported that Time I generated a similar degree of harm emotions as Time III. One possible explanation is that harm emotions which measure sadness, guilt, and disappointment were relevant before the examination by reflecting the students' lack of preparedness for the examination (Time I). Although challenge emotions were expected to decrease from Time I to Time III, this did not occur as indicated in Table I. A person is more likely to be hopeful before the examination than after it, according to Lazarus (1984). However, given that this examination was the first in a set of four examinations scheduled for these students, the challenge emotions generated at Time III could be explained as reflecting hopeful anticipation toward the next set of examinations.

The results on harm and challenge emotions contradict Lazarus'

conclusions established in his study (Lazarus & Folkman, 1985), on examination stress. In the Lazarus and Folkman study, all three of the stress emotions changed during the course of the three stages of a mid-term examination. The evidence unquestionably supported the position that a process was in effect. One possible implication that can be drawn is that the situational demands of the first examination in a term, which was investigated in this study, are significantly different from the demands and expectations of one mid-term examination. A further problem in comparing the results of these two studies is that opportunities for observing changes in this present study were diminished because emotional changes were computed for only two stages.

The results for considering coping as a process were also inconclusive. Significant changes in coping, however, were revealed by observing the results for each coping scale. The significant decreases in the use of problem-focused coping, wishful thinking, and self-isolation from Time I to Time III demonstrates that coping does change as the stressful encounter unfolds. When the outcome of the examination is known (Time III), these coping efforts presumably serve no useful purpose. The absence of significant changes in the remaining types of coping from Time I to Time III suggests that no one situational demand was experienced by the group as a whole.

Situational Determinants of Threat Emotions

From this study, it was concluded that individual differences in emotional reactions recorded at each stage of the examination were

due in large part to cognitive appraisal and coping. These findings confirmed and strengthened Lazarus' theoretical formulation. According to Lazarus (1984), a transaction is considered stressful only if a person appraises it as stressful. The more the person attaches significance to a given situation and has a stake in its outcome, the greater the potential for emotion to be generated in the encounter. A person's appraisal of the situation also influences the way s/he copes with the perceived demands of the potential stressful encounter (Lazarus & Folkman, 1985).

The findings revealed that students who judged the examination to be of significance and, thus, had a stake in its outcome, also indicated more intense threat emotions. In order to manage this increase in threat emotions generated the day of the examination (Time II), the affected students used all eight types of coping. However, the following two strategies were significantly used less frequently: 1) emphasizing the positive aspects of the examination, and 2) distancing from the examination. The more threatened a student felt in anticipating the examination, the more likely s/he would engage in multiple strategies which included both problem-focused coping and emotion-focused coping.

Having a stake in the situation also evoked a significant increase in harm reactions the day of the test (Time II). A very similar pattern emerged for stakes and harm emotions as did for stakes and threat emotions. The more harmed a student expected to be, the more likely he/she would utilize the majority of the coping strategies:

problem-focused coping, wishful thinking, distancing, seeking social support, self-blame, tension-reduction, and self-isolation. The greater the stake in the examination, the more the student is invested in spending time and energy coping with his/her threatened and/or harmed feelings.

Cognitive appraisal was assessed not only by stakes, but also by difficulty of the examination. No significant relationship was reported to exist between difficulty of the examination and threat emotions (Time II). The reason for this unexpected outcome may result from the method in which this scale was measured. A one-time question on difficulty of the test may not be sufficient data to capture an accurate assessment.

Personality Trait Predictors of Coping

It appears that this is the first study to investigate how personality traits interact with other mediating variables - thoughts, feelings, and coping strategies to shape the course of a specific, stressful encounter. Personality traits were considered an important dimension that would help explain the large individual differences recorded. In the previous section, individual differences were explained by cognitive appraisal and coping, which supports Lazarus' (1984) cognitive theory. However, there is support for the position that personality traits influence a person's perception of both the nature of the stressful situation and the ability to meet it (Sarason, 1984).

This study considered the importance of the personality traits; test anxiety, self-esteem, and self-efficacy, as it relates to the person's use of specific types of coping. The findings revealed that highly-anxious students who attempted to manage their anxiety and meet the demands of preparing for an examination (Time I), were more likely to use at least five different types of emotion-focused coping. Their lack of the use of problem-focused coping suggests highly-anxious students invest their time and energy managing their anxious feelings at the expense of preparing for the examination. A potential profile of the highly-anxious student begins to emerge by observing their choices of emotion-focused strategies. Associated with the highly test-anxious student is wishful thinking, seeking social support, self-blame, tension-reduction, and self-isolation. The typical use of self-blame and self-isolatior by highly-anxious students substantiates Spielberger's (1972) findings that highly test-anxious students are more self-critical than students with low test-anxiety. This information would be crucial for educators and counselors interested in designing programs for test-taking anxiety among college students.

Self-esteem's relationship to coping revealed significant findings as well. Students with high self-esteem have little use for self-blame and self-isolation when anticipating and preparing for a test (Time I). This data does not provide the basis for a complete profile for it does not describe what coping efforts a student with high self-esteem would do in meeting the demands of the situation. Given that highly test-anxious students cope by using self-blame and self-

isolation, and students with high self-esteem don't engage in self-blame and self-isolation, it could be postulated that students with high test-anxiety might be low in self-esteem. This notion might be further investigated by educators and counselors concerned with decreasing test anxiety and increasing self-esteem.

Test efficacy was found to have a significant relationship to a coping strategy as well. Test efficacy refers to an ability to take tests in general. A person who judges her/his test-taking ability as high, typically uses problem-focused coping when preparing for a test (Time I). To improve one's sense of master of tests in general, increasing the use of this strategy is suggested.

Personality Trait Predictors of Emotion

Spielberger (1972) contends that although examination situations are stressful and evoke anxiety reactions in most students, students with high test-anxiety will experience the test situation as more threatening. The findings in this study substantiate this position. A highly test-anxious student describes him/herself as thinking irrelevant thoughts, worried, tense, and sensitive to their bodily reactions and feels intensely threatened on the day of the test (Time II). Further evidence that test anxiety affects emotional reponses in general is found in a study by Spielberger (1972). He contends that the highly test-anxious student's emotional responses will be more intense than students with low anxiety. This position is somewhat supported in this study. Not only were increased threat emotions linked to test anxiety, but also harm emotions were signifi-

cantly elevated. As it was expected, challenge emotions were not associated with the test-anxious student. This emerging profile of the highly test-anxious student suggests that many of their emotional and coping resources are directed at managing their feelings rather than focusing on the task of taking the examination (Time II). By decreasing irrelevant thinking, worry, tension, and awareness of bodily arousal of the test-anxious student, the degree of threat and harm emotions associated with the task of taking a test is expected to decrease.

In conclusion, personality traits, as well as appraisal and coping, interacted in a way that significantly explained the large variations in threat emotions recorded the day of the test (Time II). A student manifesting a high degree of bodily arousal and tension, self-esteem, stakes in the outcome of the examination, self-blame, and thinking focused on the task of taking the examination can be predicted to feel highly threatened on the day of the test (Time II). Personality traits that persist from situation-to-situation also combine with situational factors to create this student profile. This profile provides clues as to how to diminish the level of threat generated the day of the test.

Recommendations

Stress and Coping as a Process

The data collected revealed that only threat emotions significantly changed during the two stages of the examination in which they were examined. In this respect, a process was in effect. This research marks only the second study on examination stress. Lazarus' (1985) study showed all three stress emotions significantly changing during three stages of an examination. Since certain aspects of the two studies are dissimilar and somewhat contradictory, further research on examination stress is recommended in order to convincingly substantiate that stress and coping are processes. These examination studies should be conducted at the community college, as well as the university level, during three phases of an examination: the beginning, middle, and end of a term; thereby creating a more comprehensive understanding of students' seemingly complex reactions to tests. For, without focusing on processes that unfold over a period of time, we cannot learn how people come to manage stressful examination situations.

Situational Determinants of Emotion

The research demonstrated that at any given phase of the examination there were substantial individual differences in cognitive appraisal and coping. The greater the stake; i.e., appraisal, in the outcome, the more likely the student will feel threatened and/or harmed. The affected student will direct her/his coping resources to managing these intense feelings rather than focusing on the task of the

examination. If this research and premise is accepted, then it seems clear that if the academic goal of achievement is to be met, the emotional climate for test taking for students must be improved. It is, therefore, recommended that educators and counselors develop testing procedures that serve to facilitate students focusing on the task of preparing for the examination. Reducing the stakes of a particular examination might serve to enhance performance. A number of tests throughout the term, the choice to cancel out the effects of the worst grade, and a variety of evaluative assessments are suggested strategies toward this end. A counseling program designed to educate students as to the nature and impact of the significance of stakes associated with examinations should greatly assist students' understanding of their stressful reactions in test situations and potentially improve their performance. A treatment approach that emphasized cognitive theory would be instrumental in changing the appraisal or stakes and alter any information-processing distortions.

Reducing threat and harm emotional reactions and enhancing challenge emotions would also allow the student to attend more to the task of the examination. Study skills classes, as well as individual and group counseling procedures, should be designed to promote emphasizing the positive aspects of the examination, as well as problem-focused coping. These two coping strategies, which are significantly related to challenge emotions, can be effectively encouraged and strengthened by a variety of counseling procedures, such as visualization, self-affirmations, confidence building, rational-emotive imagery, decision making, and time management.

Personality Traits as Predictors of Coping and Emotion

Overall, the research evidence shows a persistent and significant relationship between the personality trait, test anxiety, as a predictor of coping and emotion. The results on test anxiety produce sufficient data to create a profile of the test-anxious students' pattern of coping and emotional reaction to tests. On the day of the test, a highly test-anxious student feels intensely threatened at the thought of taking a test and attempts to cope with these feelings by the use of wishful thinking, seeking social support, self-blame, tension-reduction, and self-isolation.

If this research and premise is accepted, then it seems that the way highly test-anxious students attempt to manage their feelings, and meet the demands of the examination situation needs to be improved. Counseling strategies that will serve to enhance the performance and comfort level of highly test-anxious students need to be developed. Counseling services in higher education need to be established for test-anxious students that de-emphasize wishful thinking and promote problem-focused coping would not only be expected to reduce the level of threat emotions and increase the level of challenge emotions, but also favorably improve the amount of worry and test-irrelevant thinking characteristic of test-anxious students. Test-anxious students need to make more favorable appraisals about their performance and re-appriase the outcome in more positive ways. Counseling services that would contribute to producing these desired changes is highly recommended. These students also report a keen awareness of bodily arousal

and tension. Relaxation techniques, meditation, biofeedback, and physical exercise are suggested additional components for this program to help monitor and manage intense feelings of tension and threat.

Test-anxious students' coping strategies need to be taken into consideration also. Given that the data revealed highly test-anxious students cope by using self-blame and self-isolation, and that students with high self-esteem don't engage in self-blame and self-isolation, counseling efforts directed at improving test-anxious students' self-esteem are recommended. A counseling program that offers task-oriented groups that focus on positive thinking, thought stopping, confidence building, and assertiveness training, would need to be tailored to the special vulnerabilities and coping deficiencies of these students. Institutions of higher education need to be apprised of the importance of both group and individual counseling services in assisting students with this prevalent and stressful problem - test anxiety.

BIBLIOGRAPHY

Folkman, S. and Lazarus, R.S. (1980). If it changes it must be a process. A study of emotion and coping during three stages of a college examination. Journal of Personality and Social Psychology, 48, 150-170.

Lazarus, R.S., and Folkman, S. (1984). Stress, appraisal, and coping. New York: Springer Publishing Company.

Sarason, I.G. (1984). Stress, anxiety, and cognitive interference: Reactions to tests. Journal of personality and Social Psychology, 46, 929-938.

Spielberger, C.D. (Ed.) (1972). Anxiety: Current trends in theory and research (Vols 1 and 2). New York: Academic Press